



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D.C. 20460

December 26, 2001

OFFICE OF THE ADMINISTRATOR
EPA SCIENCE ADVISORY BOARD

Note to the Reader:

The attached draft report is a draft report of the EPA Science Advisory Board (SAB). The draft is still undergoing final internal SAB review, however, in its present form, it represents the consensus position of the panel involved in the review. Once approved as final, the report will be transmitted to the EPA Administrator and will become available to the interested public as a final report.

This draft has been released for general information to members of the interested public and to EPA staff. This is consistent with the SAB policy of releasing draft materials only when the Committee involved is comfortable that the document is sufficiently complete to provide useful information to the reader. The reader should remember that this is an unapproved working draft and that the document should not be used to represent official EPA or SAB views or advice. Draft documents at this stage of the process often undergo significant revisions before the final version is approved and published.

The SAB is not soliciting comments on the advice contained herein. However, as a courtesy to the EPA Program Office which is the subject of the SAB review, we have asked them to respond to the issues listed below. Consistent with SAB policy on this matter, the SAB is not obligated to address any responses which it receives.

1. Has the Committee adequately responded to the questions posed in the Charge?
2. Are any statements or responses made in the draft unclear?
3. Are there any technical errors?

For further information or to respond to the questions above, please contact:

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[Date]

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Governor Christine Todd Whitman
Administrator
United States Environmental Protection Agency
Mail Code 1101A
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Subject: Importance of Maintaining the Annual Pollution Abatement and Control
Expenditures (PACE) Survey

Dear Governor Whitman:

This Commentary was developed by the Environmental Economics Advisory Committee (EEAC) of the Science Advisory Board (SAB) subsequent to a discussion with staff of the U.S. EPA's National Center for Environmental Economics and other Agency officials at the EEAC's public meeting on November 30, 2001. The Committee prepared this Commentary to bring to your attention the great importance of maintaining the annual Pollution Abatement and Control Expenditures (PACE) Survey, the only source of consistent nationwide information available on the costs of environmental protection.

The PACE Survey was conducted annually from 1973 through 1994 by the U.S. Bureau of the Census, when it was suspended by the Bureau for budgetary reasons. In November of 1998, the EEAC held a discussion with the former Assistant Administrator for Policy, Planning, and Evaluation, and followed up with a Commentary to Administrator Browner in January, 1999, on the "Importance of Reinstating the PACE Survey" (EPA-SAB-EEAC-COM-99-01). Four months later, EPA announced that it would reinstate the PACE Survey, with support from the Bureau of the Census. A workshop was then held at Resources

for the Future to improve the Survey instrument, and in the year 2000 a Survey was carried out of 1999 costs.

The time has now come (and perhaps has gone) for a Survey of year 2000 costs, but budgetary concerns have been expressed by EPA officials. This may partly be due to the fact that the U.S. Office of Management and Budget is apparently requiring that an evaluation be carried out of the PACE instrument, and there seems to be some question of whether EPA can support both the evaluation and the Survey in a single year. There has also been discussion of the possibility of saving funds by carrying out Surveys in the future on a bi-annual basis. *The Committee views the maintenance of an uninterrupted, annual PACE Survey as an exceptionally high priority.*

The PACE Survey data provide a truly unique tool for evaluation of the costs of compliance with environmental regulations. The collection of these data has provided the United States with an important source of information to facilitate the evaluation of environmental programs and, in turn, to improve the design and performance of these programs. EPA has used the PACE data in its Cost of Clean reports, the Section 812 Clean Air Retrospective Cost Analysis, numerous sector-specific studies, Regulatory Impact Analyses, analyses of recycling activities, and national studies of environmental protection activities. The relatively low cost of the PACE Survey, combined with its great benefits to EPA, means that the annual Survey provides the Agency with a tremendous return on its investment.

In addition, the existence of the Survey data has seeded considerable academic interest and activity. Staff from EPA's National Center for Environmental Research (in the Office of Research and Development) indicated at our November 30th EEAC meeting that in the past year it had received more than a dozen proposals that involved the use of PACE Survey data.

At once, the PACE Survey provides a means to assess the costs of environmental regulations in general and individually, and it provides a means to compare the cost-effectiveness of various regulatory approaches. The systematic collection of information on the costs of regulation is essential to meet expanding legal requirements for review of the costs of regulation, and it is important for EPA's efforts to develop sound and effective regulations.

The PACE Survey provides data at three distinct levels, each valuable to EPA. First, the published PACE Survey provides aggregate data on pollution abatement spending, both for new capital expenditures and for operating costs. This supports calculations for numerous EPA reports, and provides an overall benchmark for examining trends in abatement expenditures over time.

Second, the PACE Survey provides abatement cost spending data at the industry- and state-specific level. EPA has used this data for sector-specific studies and Regulatory Impact Analyses. Researchers have used this data to examine the relationship between abatement costs

and productivity growth at the industry level and to calculate indices of state regulatory intensity using differences in PACE-based abatement costs across states.

Third, the plant-level data collected for the PACE Survey can be linked with other Census-collected data for those plants, and accessed by researchers working at Census Research Data Centers around the country under strict controls to maintain confidentiality. This data has already been used in projects analyzing a number of important questions: how abatement costs are related to productivity levels across plants, how abatement investment affects other capital investment, how effective abatement spending is in reducing emissions, and whether abatement costs are related to local benefits from pollution abatement.

The value of any set of data of the type collected through the PACE Survey is significantly enhanced as the longevity and consistency of the data series is expanded. In other contexts, the Agency has argued that inconsistent funding of monitoring, leading to interruptions in monitoring data, has undermined the achievement of environmental goals. The same reasoning applies to the collection of data on the costs of compliance with environmental laws and regulations.

It is exceptionally important that the Survey continue to be conducted annually, to provide continuous plant-level data. This is especially important for capital expenditures: these data tend to be very lumpy, and collecting the data less than annually would result in missing large amounts of investment and weaken researchers' ability to identify the pollution abatement capital stock at a plant. Examining the timing of the impact of abatement costs on plants requires a complete time-series of data.

The PACE Survey has significant spill-over benefits affecting the various program offices in the Agency, and a number of other agencies. Therefore, the cost of the Survey should be shared with offices across and even outside the agency, rather than being concentrated in any one office or agency. The funding of the National Health and Nutrition Examination Survey could serve as a useful model.

With annual private sector expenditures for environmental compliance exceeding \$200 billion, an annual expenditure of less than \$2 million seems to be a modest and exceptionally sound investment to acquire the only systematic information available of the costs of environmental regulation.

We hope this Commentary offers some insights into the importance of the PACE Survey to EPA for achieving its mission, and we urge you to take immediate action to support the maintenance of an uninterrupted, annual PACE Survey. The Committee will be pleased to answer any questions you or your staff may have.

Sincerely,

